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APPLICATION N	0.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/749,555		12/28/2000	Masahiro Ando	G5030.0023 /P023	5633
24998	7590	03/15/2005		EXAMINER	
		APIRO MORIN & C	NAJARIAN, LENA		
2101 L St Washingto	-			ART UNIT PAPER NUMBER	
	,		·	3626	
				DATE MAILED: 03/15/200	5

Please find below and/or attached an Office communication concerning this application or proceeding.

		J						
	Application No.	Applicant(s)						
$\bigvee$	09/749,555	ANDO ET AL.						
<b>○ Office Action Summary</b>	Examiner	Art Unit						
	Lena Najarian	3626						
The MAILING DATE of this communication ap Period for Reply	pears on the cover sheet wi	th the correspondence add	dress					
	VIC CET TO EVOIDE 2 M	ONTH(S) EDOM						
A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply if NO period for reply is specified above, the maximum statutory period.  - Failure to reply within the set or extended period for reply will, by statut Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	136(a). In no event, however, may a rolly within the statutory minimum of third will apply and will expire SIX (6) MON te, cause the application to become AB	reply be timely filed  by (30) days will be considered timely  ITHS from the mailing date of this co  BANDONED (35 U.S.C. § 133).						
Status								
1) Responsive to communication(s) filed on 28 L	<u>December 2000</u> .							
2a) This action is <b>FINAL</b> . 2b) ⊠ Thi	s action is non-final.							
3) Since this application is in condition for allows	i de la companya de	·	merits is					
closed in accordance with the practice under	Ex parte Quayle, 1935 C.D	1. 11, 453 O.G. 213.						
Disposition of Claims								
4) Claim(s) 1-25 is/are pending in the application	٦.							
4a) Of the above claim(s) 20-25 is/are withdra	4a) Of the above claim(s) 20-25 is/are withdrawn from consideration.							
5) Claim(s) is/are allowed.								
6)⊠ Claim(s) <u>1-19</u> is/are rejected.			•					
	Claim(s) is/are objected to.							
8) Claim(s) are subject to restriction and/	or election requirement.							
Application Papers								
9) The specification is objected to by the Examin	er.							
10)⊠ The drawing(s) filed on 12 April 2001 is/are: a	D) ☐ The drawing(s) filed on 12 April 2001 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.							
Applicant may not request that any objection to the	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correct	Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11)⊠ The oath or declaration is objected to by the E	examiner. Note the attached	d Office Action or form PT	O-152.					
Priority under 35 U.S.C. § 119								
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).								
a) ☐ All b) ☐ Some * c) ☐ None of:	a) All b) Some * c) None of:							
1. Certified copies of the priority documents have been received.								
2. Certified copies of the priority documents have been received in Application No								
3. Copies of the certified copies of the price	3. Copies of the certified copies of the priority documents have been received in this National Stage							
application from the International Burea								
* See the attached detailed Office action for a lis	t of the certified copies not	received.						
Attachment(s)	_	_						
Notice of References Cited (PTO-892)     Notice of Draftsperson's Patent Drawing Review (PTO-948)		Summary (PTO-413) s)/Mail Date						
<ol> <li>Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08 Paper No(s)/Mail Date 20010511.</li> </ol>		nformal Patent Application (PTC	)-152)					

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### **DETAILED ACTION**

#### Election/Restrictions

- 1. Applicant's election without traverse of Group I (claims 1-19) in the reply filed on December 23, 2004 is acknowledged.
- 2. Claims 20-25 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to nonelected inventions, there being no allowable generic or linking claim. Election was made without traverse in the reply filed on December 23, 2004.

#### Oath/Declaration

3. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:

It does not identify the city and either state or foreign country of residence of Masahiro Ando. The residence information may be provided on either on an application data sheet or supplemental oath or declaration.

#### **Drawings**

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: item 105 (page 23, line 3). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures

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appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

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5. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: item 200 (Fig. 1), item ST24 (Fig. 6), item ST211 (Fig. 4), item ST313 (Fig. 13), items 101, 104-108, and 110 (Fig. 17). Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

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# Specification

6. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

7. The abstract of the disclosure is objected to because the abstract filed 4/12/01 exceeds 150 words in length and the abstract filed on 6/14/01 includes legal phraseology, such as "means" at line 1. Correction is required. See MPEP § 608.01(b).

## Claim Rejections - 35 USC § 103

- 8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 9. Claims 1-3, 9, 11-12, 14-15, and 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heikkila et al. (US 6,428,476 B1) in view of Sham et al. (5,891,042).
- (A) Referring to claim 1, Heikkila discloses a heart rate monitor, comprising:

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identity check means for verifying a user's identity, said identity check means operable in an active mode (col. 9, lines 23-26 of Heikkila);

wherein a recording means records heart rate information as valid data only after said identity check means has verified said user's identity when said identity check means is operated in said active mode (col. 3, line 56 - col. 4, line 7 of Heikkila; the Examiner interprets "stored" to be a form of "recording").

Heikkila does not disclose a motion sensor adapted to measure an exercise motion of a user and recording means for recording an output data of said motion sensor.

Sham discloses a motion sensor adapted to measure an exercise motion of a user and recording means for recording an output data of said motion sensor (col. 1, lines 19-21 & 33-36 of Sham; the Examiner interprets "distance" to be a form of "output data").

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the features of Sham within Heikkila. The motivation for doing so would have been to effectively provide the user with physiological information concerning their exercise level while at the same time providing empirical information with respect to the duration and extent of a workout (col. 2, lines 46-50 of Sham).

(B) Referring to claim 2, Heikkila discloses wherein said verifying said user's identity is processed without notice (col. 6, lines 23-27 of Heikkila).

(C) Referring to claim 3, Heikkila discloses wherein said verifying said user's identity is processed by said user in said exercise motion right after a predetermined length of

time has passed (col. 6, lines 42-48 of Heikkila; the Examiner interprets "duration" to be a form of "length of time").

- (D) Referring to claim 9, Heikkila discloses wherein said verifying said user's identity is processed by physiological data of said user (abstract of Heikkila; the Examiner interprets "heart rate" to be a form of "physiological data").
- (E) Referring to claim 11, Heikkila discloses in addition to said identity check means, a wearing check means to verify that said monitor is actually being worn by said user (col. 3, lines 5-15 & 33-40 of Heikkila);

wherein said recording means records said exercise motion as valid data only after said wearing check means has verified that said monitor is actually being worn by said user (col. 4, lines 1-7 of Heikkila).

- (F) Referring to claim 12, Heikkila discloses wherein said wearing check means is activated based on an instruction which said user can not obtain unless said user is actually wearing said exercise monitor adjacent to the skin of said user (Fig. 1A, item 104 and col. 3, lines 5-15 of Heikkila).
- (G) Referring to claim 14, Heikkila discloses wherein said wearing check means is processed based on a characteristic signal which can be detected only when said user is exercising while wearing said exercise monitor (col. 3, lines 5-32 of Heikkila; the Examiner interprets "heart rate" to be a form of "characteristic signal").
- (H) Referring to claim 15, Heikkila does not disclose wherein said exercise monitor is provided with a step counter equipped with said motion sensor to detect a walking

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motion, and said motion sensor can verify said wearing by a motion characteristic of walking.

Sham discloses wherein said exercise monitor is provided with a step counter equipped with said motion sensor to detect a walking motion, and said motion sensor can verify said wearing by a motion characteristic of walking (col. 1, lines 13-35 of Sham; the Examiner interprets "pedometer" to be a form of "step counter").

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the feature of Sham within Heikkila. The motivation for doing so would have been to calculate and display useful information to the user such as distance covered, number of steps taken, current speed, calories burned, etc. (col. 3, lines 1-5 of Sham).

(I) Referring to claim 18, Heikkila does not disclose wherein said wearing check means is processed if there is a high correlation between acceleration data of said user which is obtained only if said monitor is actually being worn by said user, and an output of said motion sensor.

Sham discloses wherein said wearing check means is processed if there is a high correlation between acceleration data of said user which is obtained only if said monitor is actually being worn by said user, and an output of said motion sensor (col. 2, line 59 – col. 3, line 5 of Sham; the Examiner interprets "speed" to be a form of "acceleration data").

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the feature of Sham within Heikkila. The motivation for doing

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so would have been to calculate and display pedometer functions and calculate a target zone heart rate based on the user's physical characteristics (col. 2, line 65 - col. 3, line 5 of Sham).

(J) Referring to claim 19, Heikkila does not disclose wherein said acceleration data of said user is a synchronized exercise rhythm generated by said exercise monitor and obtained only if said monitor is actually being worn by said user, and said verifying is processed if there is a high correlation between said synchronized exercise rhythm and an acceleration of said user's body which is related to said output of said motion sensor.

Sham discloses wherein said acceleration data of said user is a synchronized exercise rhythm generated by said exercise monitor and obtained only if said monitor is actually being worn by said user, and said verifying is processed if there is a high correlation between said synchronized exercise rhythm and an acceleration of said user's body which is related to said output of said motion sensor (abstract and col. 2, line 59 – col. 3, line 5 of Sham).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the feature of Sham within Heikkila. The motivation for doing so would have been to calculate and display pedometer functions and calculate a target zone heart rate based on the user's physical characteristics (col. 2, line 65 - col. 3, line 5 of Sham).

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- 10. Claims 4-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heikkila et al. (US 6,428,476 B1) in view of Sham et al. (5,891,042) as applied to claim 1 above, and further in view of Lang (US 2002/0070954 A1).
- (A) Referring to claim 4, Heikkila and Sham do not disclose wherein said verifying said user's identity is processed by asking said user one or more specific questions and allowing said user to input one or more correct answers for said one or more specific questions.

Lang disclose wherein said verifying said user's identity is processed by asking said user one or more specific questions and allowing said user to input one or more correct answers for said one or more specific questions (para. 42, lines 21-28 of Lang).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the features of Lang within Heikkila and Sham. The motivation for doing so would have been for the user to gain access to the service (para. 42, lines 22-24 of Lang).

(B) Referring to claims 5 and 7, Heikkila and Sham do not disclose wherein said one or more questions are selected out of a plurality of questions previously registered in said exercise monitor and wherein said one or more specific questions are delivered by telephone or said questions are stored in said exercise monitor in advance.

Lang discloses wherein said one or more questions are selected out of a plurality of questions previously registered in said exercise monitor and wherein said one or more specific questions are delivered by telephone or said questions are stored in said

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exercise monitor in advance (para. 42, lines 1-28 and abstract of Lang; the Examiner interprets "fitness enabling and motivating service" to be a form of "exercise monitor").

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the features of Lang within Heikkila and Sham. The motivation for doing so would have been to provide a secure method of access to the system (para. 42, lines 21-24 of Lang).

(C) Referring to claim 6, Heikkila and Sham do not disclose wherein said verifying said user's identity is processed by asking said user one or more specific questions without notice.

Lang discloses wherein said verifying said user's identity is processed by asking said user one or more specific questions without notice (para. 42, lines 21-28 of Lang).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the features of Lang within Heikkila and Sham. The motivation for doing so would have been to provide a secure method of access to the system (para. 42, lines 21-24 of Lang).

(D) Referring to claim 8, Heikkila and Sham do not disclose wherein said one or more correct answers for said one or more specific questions are personal key words which only said user knows.

Lang discloses wherein said one or more correct answers for said one or more specific questions are personal key words which only said user knows (para. 42, lines 21-28 of Lang; the Examiner interprets "mother's maiden name" to be a form of "personal key words").

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the feature of Lang within Heikkila and Sham. The motivation for doing so would have been to prevent fraudulent access to the system (para. 42, lines 20-28 of Lang).

- 11. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Heikkila et al. (US 6,428,476 B1) in view of Sham et al. (5,891,042) as applied to claims 1 and 9 above, and further in view of Kulkarni (US 2001/0032098 A1).
- (A) Referring to claim 10, Heikkila and Sham do not disclose wherein said physiological data is a fingerprint pattern or voiceprint pattern of said user.

Kulkarni discloses wherein said physiological data is a fingerprint pattern or voiceprint pattern of said user (para. 29 of Kulkarni).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the features of Kulkarni within Heikkila and Sham. The motivation for doing so would have been to ensure the integrity of the data being transmitted (para. 33 of Kulkarni).

- 12. Claims 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heikkila et al. (US 6,428,476 B1) in view of Sham et al. (5,891,042) as applied to claims 1 and 11 above, and further in view of Richardson et al. (5,976,083).
- (A) Referring to claim 16, Heikkila and Sham do not disclose wherein said wearing check means is actually being worn by said user, is processed if there is a high

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correlation between physiological data of said user which is obtained only if said monitor is actually being worn by said user, and an output of said exercise monitor.

Richardson discloses wherein said wearing check means is actually being worn by said user, is processed if there is a high correlation between physiological data of said user which is obtained only if said monitor is actually being worn by said user, and an output of said exercise monitor (col. 1, lines 5-13 and col. 31, lines 39-44 of Richardson; the Examiner interprets "heart rate" to be a form of "physiological data" and "expended energy" to be a form of "output").

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the features of Richardson within Heikkila and Sham. The motivation for doing so would have been to determine the relationship between energy expenditure and heart rate and use the data to detect any violations (col. 32, lines 4-15 of Richardson).

(B) Referring to claim 17, Sham and Heikkila do not disclose wherein said physiological data of said user is a synchronized exercise rhythm generated by said exercise monitor and obtained only if said monitor is actually being worn by said user, and said verifying is processed if there is a high correlation between said synchronized exercise rhythm and a pulse wave data of said user which is said output of said exercise monitor.

Richardson discloses wherein said physiological data of said user is a synchronized exercise rhythm generated by said exercise monitor and obtained only if said monitor is actually being worn by said user, and said verifying is processed if there is a high correlation between said synchronized exercise rhythm and a pulse wave data

of said user which is said output of said exercise monitor (col. 4, lines 19-26 and col. 27, lines 60-67 of Richardson; the Examiner interprets "gait" to be a form of "exercise rhythm" and "beat" to be a form of "pulse").

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the features of Richardson within Sham and Heikkila. The motivation for doing so would have been to detect any violations (col. 32, lines 4-15 of Richardson).

- 13. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Heikkila et al. (US 6,428,476 B1) in view of Sham et al. (5,891,042) as applied to claims 1 and 11-12 above, and further in view of Heilman et al. (5,078,134).
- (A) Referring to claim 13, Heikkila and Sham do not disclose wherein said instruction which said user can not obtain unless said user is actually wearing said exercise monitor adjacent to the body of said user, is to vibrate a portion of the skin of said user.

Heiman discloses wherein said instruction which said user can not obtain unless said user is actually wearing said device adjacent to the body of said user, is to vibrate a portion of the skin of said user (Fig. 17 and col. 14, lines 55-58 of Heilman).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the feature of Heilman within Heikkila and Sham. The motivation for doing so would have been to alert the user of an incoming message (col. 14, lines 55-58 of Heilman).

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#### Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The cited but not applied prior art teaches a remote pedometer (US 6,334,848 B1); an exercise machine (US 6,702,719 B1); systems and methods for providing an improved exercise device with access to motivational programming over telephone communication connection lines (US 2002/0165067 A1); a fitness triage system and method (6,159,131); a therapeutic behavior modification program, compliance monitoring and feedback system (6,039,688); an apparatus to control diet and weight using human behavior modification techniques (5,673,691); an exercise in diabetes management ("Exercise in Diabetes Management; Maximizing Benefits, Controlling Risks"); and wellness programs ("Wellness programs: Complying with the Americans with Disabilities Act (ADA)").

Also included is provisional application 60/254,038, which is a priority document to applied reference US 2002/0070954 A1 (Lang).

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lena Najarian whose telephone number is (703) 305-0260. The examiner can normally be reached on Monday - Friday, 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Thomas can be reached on (703) 305-9588. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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